

POTASSIUM PERMANGANATE SOLUTION 0.02 MOL/LIT CITRISOL 1.5805g KMnO₄ FOR 500ml SOLUTION 0.1N SOLUTION

MATERIAL SAFETY DATA SHEET SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1 | Product identifiers Product name | : | Potassium Permanganate Solution 0.02 Mol/lit Citrisol 1.5805g KMnO ₄ For 500 ml Solution 0.1N Solution | |
|-----|---|---|---|--|
| | Product Code | : | 878780 | |
| 1.2 | Relevant identified uses of the substance or mixture and uses advised against | | | |
| | Identified uses | : | Laboratory chemicals, Industrial & for professional use only. | |
| 1.3 | Details of the supplier of the safety data sheet | | | |
| | Company | : | Central Drug House (P) Ltd 7/28 Vardaan House New Delhi -110002 INDIA | |
| | Telephone Email | : | +91 11 49404040 <u>care@cdhfinechemical.com</u> | |
| 1.4 | Emergency telephone number | | | |
| | Emergency Phone # | : | +91 11 49404040 (9:00am - 6:00 pm) [Office hours] | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Hazardous to the aquatic environment-Chronic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 Pictogram

Signal wordWarningHazard statement(s)Toxic to aquatic life with long lasting effects.H411Toxic to aquatic life with long lasting effects.Precautionary statement(s)Avoid release to the environment.P273Avoid release to the environment.P391Collect spillage.P501Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Supplemental Hazard none Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

| Hazardous ingredien Component | ts according to Regulatio | n (EC) No 1272/2008 Classification | Concentration |
|----------------------------------|---------------------------|--|----------------|
| Potassium permanga | nate | | |
| CAS-No. | 7722-64-7 | Ox. Sol. 2; Acute Tox. | >= 1 - < 5 % |
| EC-No. | 231-760-3 | (oral) 4; Aquatic acute 1; | |
| Index-No. | 025-002-00-9 | Aquatic chronic 1;H272, H302, H400, H410; | |
| Sodium Carbonate | | | |
| CAS-No. | 497-19-8 | | >=0.1 - < 1 % |
| EC-No. | 207-838-8 | | |
| Index No. | 011-005-00-2 | | |
| Water | | | |
| CAS-No. | 7732-18-5 | | >= 75 - < 99 % |
| EC-No. | 231-791-2 | | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Assure fresh air breathing. Allow the victim to rest.

In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

In case of eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

If swallowed

Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

- 4.2 Most important symptoms and effects, both acute and delayed Symptoms relating to use: Not expected to present a significant hazard under anticipated conditions of normal use.
- **4.3** Indication of any immediate medical attention and special treatment needed Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Foam, Dry powder, carbon dioxide, water spray, sand. Unsuitable extinguishing media: Do not use a heavy water stream. Surrounding fires: Use water spray or fog for cooling exposed containers.

5.2 Special hazards arising from the substance or mixture Under fire conditions, hazardous fumes will be present.

5.3 Advice for firefighters

Protection against fire: Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

5.4 Further information No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures For emergency responders: Equip cleanup crew with proper protection. Ventilate area. For non-emergency personnel: Evacuate unnecessary personnel.

6.2 Environmental precautions Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up Clean up methods: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4 Reference to other sections See section 8. Exposure controls/personal protection

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
 Handling: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

 Technical protective measures: Provide good ventilation in process area to prevent formation of vapour.
- 7.2 Conditions for safe storage, including any incompatibilities
 Storage: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
 Storage- away from: Strong bases, strong acids, sources of ignition, direct sunlight.
- 7.3 Specific end use(s) None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| a) | Appearance | Form: liquid Colour: Purple | |
|--|--|--------------------------------|--|
| b) | Odour | No data available | |
| c) | Odour Threshold | No data available | |
| d) | рН | No data available | |
| e) | Melting point/freezing point | No data available | |
| f) | Initial boiling point and boiling range | No data available | |
| g) | Flash point | No data available | |
| h) | Evaporation rate | No data available | |
| i) | Flammability (solid, gas) | No data available | |
| j) | Upper/lower flammability or explosive limits | No data available | |
| k) | Vapour pressure | No data available | |
| I) | Vapour density | No data available | |
| m) | Relative density | No data available | |
| n) | Water solubility | Soluble | |
| o) | Partition coefficient: n- octanol/water | No data available | |
| p) | Auto-ignition temperature | No data available | |
| q) | Decomposition temperature | No data available | |
| r) | Viscosity | No data available | |
| s) | Explosive properties | No data available | |
| t) | Oxidizing properties | No data available | |
| Other safety information No data available | | | |

SECTION 10: Stability and reactivity

10.1 Reactivity No data available

9.2

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4** Conditions to avoid Direct sunlight. Extremely high or low temperatures.
- **10.5** Incompatible materials Strong acids, Strong bases.
- **10.6 Hazardous decomposition products Hazardous decomposition products**: Fumes, Carbon monoxide, Carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

- **12.2** Persistence and degradability May cause long-term adverse effects in the environment.
- **12.3 Bioaccumulative potential** No data available

12.4 Mobility in soil No data available

- 12.5 Results of PBT and vPvB assessment The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.
- 12.6 Other adverse effects Environmental precautions: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

| 14.1 | UN numbe ADR/RID: | - | IMDG: - 3082 | IATA: - 3082 |
|------|---------------------------------|--------------------------------|---|--------------|
| 14.2 | | ENVIRONMENTALLY | HAZARDOUS SUBSTANCE, LIQU HAZARDOUS SUBSTANCE, LIQU rdous Substance, Liquid, N.O.S. | · · |
| 14.3 | Transport ADR/RID: | hazard class(es) - 9 | IMDG: -9 | IATA: - 9 |
| 14.4 | Packaging ADR/RID: | • • | IMDG: - III | IATA: - III |
| 14.5 | Environme ADR/RID: r | ental hazards no | IMDG Marine pollutant: Yes | IATA: no |
| 14.6 | Special pr No data av | ecautions for user ailable | | |

SECTION 15: Regulatory information

- **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
- **15.2 Chemical safety assessment** A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

| H272 | May intensify fire; oxidizer. |
|------|--|
| H302 | Harmful if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effect. |

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.